Chapter 10

DESCRIPTION OF IMPACTED RESOURCES IN THE RENDIJA CANYON TRACT

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BACKGROUND FOR THE RENDIJA CANYON TRACT ASSESSMENT

The Rendija Canyon Tract is a 369-ha (910-ac) plot of land north of the Los Alamos town site (Figure 10.1). This land is owned by the DOE and managed by LANL, although there currently are no active facilities within the Rendija Canyon Tract. The Los Alamos Sportsmans Club (consisting of shooting ranges and several small buildings) is located within the Rendija Canyon Tract and covers 40.5 ha (100 ac). The Sportsmans Club leases the land it occupies from the DOE. The tract is surrounded by U.S. Forest Service land on all sides save for a partial border shared with Los Alamos County land to the south.

The east-west running Rendija Canyon is bordered on the south by the steep-sided Barranca and Deer Trap Mesas. To the north lies the south flank of Guaje Mountain, below which sits a flat and wide bench. The bench and canyon lose elevation from west to east, although the canyon does so at a greater rate: while only 6 m (20 ft) separate the bench and canyon bottom in the west, about 120 m (400 ft) do so in the east.

The slopes of Guaje Mountain are composed of the Tshirege Member of the Bandelier Tuff and are incised by numerous drainages creating a rugged terrain. The largest of these drainages is Cabra Canyon, located in the northwest corner of the tract. The bottom of Rendija Canyon is fairly narrow, ranging in width from 50 to 100 m (160 to 330 ft). In places the canyon has cut down to the Otowi Member of the Bandelier Tuff and the underlying beds of the Cerro Toledo Rhyolite.

The lowest point within the assessment area is in the canyon bottom at an elevation of 2,070 m (6,800 ft); the highest point in the assessment area is a little over 2,160 m (7,100 ft). Vegetation is a mixture of ponderosa pine forest and piñon-juniper woodland. There are also several open areas in which the vegetation consists of short grasses, forbs, and isolated piñon and juniper trees.

The Rendija Canyon Tract is a popular recreation spot: an improved dirt road runs the length of the canyon that people use to access the area for activities including hiking, biking, horseback riding, off-road driving, camping, and target shooting. Other modern cultural modifications to the landscape include the creation of firing range berms and other features at the Sportsmans Club. While this construction has disturbed a sizeable area, there are still several sites intact on the Club's property. Additionally, a number of marked and unmarked two-track dirt roads and trails cross the tract in all directions.

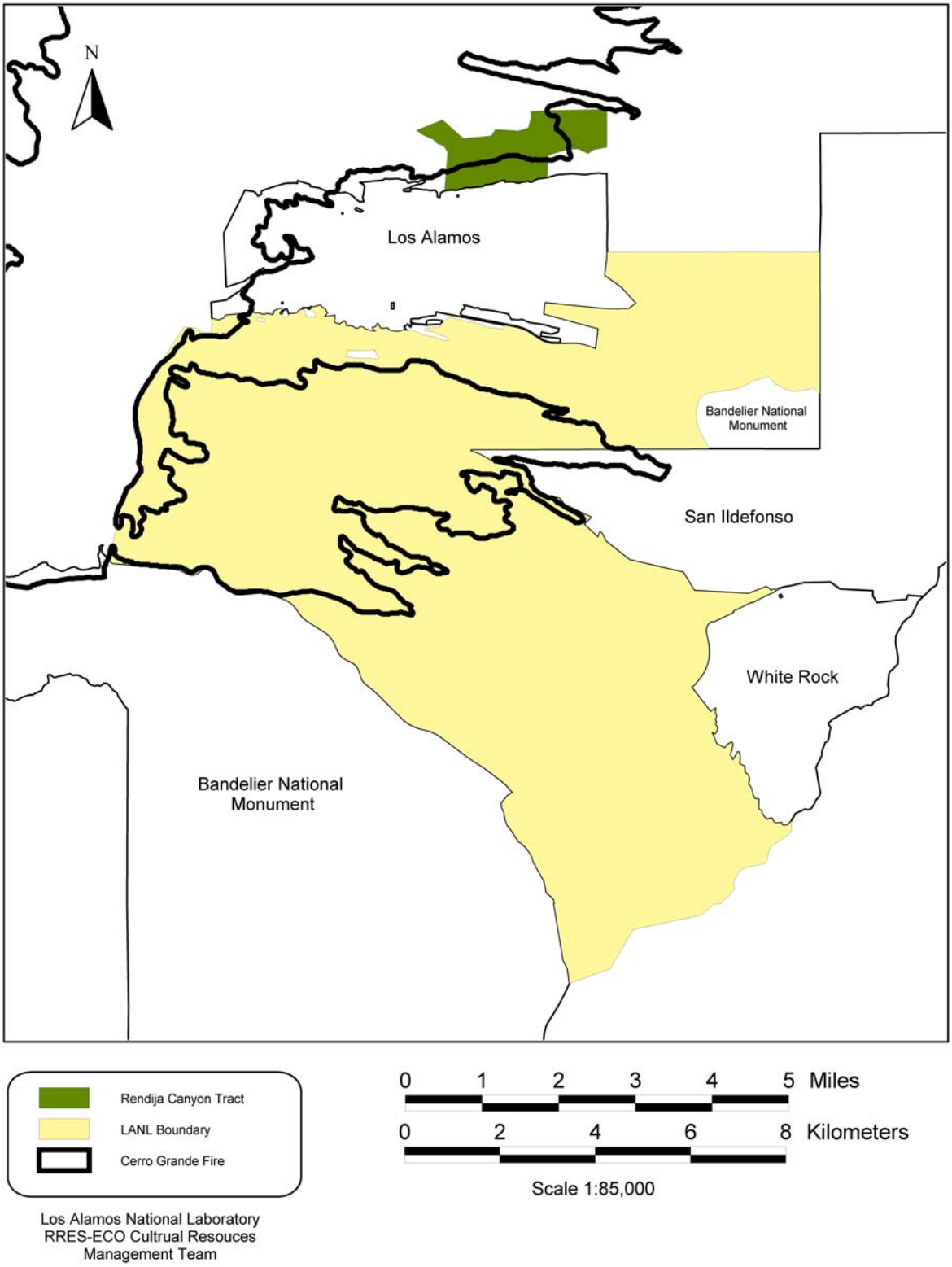

Figure 10.1. Map of the Rendija Canyon Tract.

With areas of severe, moderate, low, and no burning, the intensity of the Cerro Grande Fire in the Rendija Canyon Tract was highly variable. There was no burning in the southern or eastern portions of the tract, and the most severe burning occurred just north of the Sportsmans Club and in Cabra Canyon. In all other areas the burning was patchy and the severity variable. The fire impacted a total of 37 sites within the area.

Previous fieldwork in the Rendija Canyon Tract (Hill and Trierweiler 1986, Larson and McGehee n.d., McGehee and Manz 1991, Hill 1992, McGehee et al. 1993, and Hoagland et al. 2000) consisted of surveys and infield analyses. Work by Peterson and Nightengale (1993) in support of the earlier-proposed Bason Land Exchange resulted in the placement of one or more test pits on a number of sites. It should also be noted that Peterson and Nightengale originally located LA 99394 in the Rendija Canyon Tract; in fact, this site is on Forest Service land.

Nearly all of the sites in the Rendija Canyon Tract are either one- to three-room structures (n = 33) or rock features (n = 16). Additionally, there are six prehistoric artifact scatters, two possible teepee rings, a Homestead Era homestead complex, a historic log structure of unknown function, and a Homestead Era wagon road (Table 10.1). The one- to three-room structures are evenly distributed throughout the tract. Most of these that could be assigned a temporal affiliation dated to the Classic period. A number of the rock features may be agricultural features or remnants of fieldhouses. However, there are several rock features and even the one- to three-room structures that are clearly not fieldhouses or other typical habitation structures. These sites probably date to the Classic period. It is noted that San Ildefonso Pueblo has identified several sites within the Rendija Canyon Tract as Traditional Cultural Properties for the Bason Land Exchange project (Peterson and Nightengale 1993), a designation that received the concurrence of the State Historic Preservation Officer (SHPO).

During the fire assessment, four new sites were found (LA 135291, LA 135292, LA 135293, and LA 135294), three previously recorded sites could not be relocated (LA 85402, LA 85859, and LA 86553), and a fourth previously recorded site was determined to be only a natural rock outcrop (LA 85868). New features were found at sites LA 85858, LA 86604, and LA 127629. With the discovery of a new feature at LA 86604, this site, which had previously been determined not to be eligible for inclusion on the National Register of Historic Places (NRHP), is now possibly eligible for inclusion. Conversely, the one cultural feature at LA 70026 was destroyed by the fire, thereby making the site not eligible for inclusion on the NRHP. Before the fire, LA 70026 was considered potentially eligible. More accurate temporal affiliations were assigned to LA 127627 and LA 127630. There are now 60 archaeological sites recorded in the Rendija Canyon Tract, 47 of which are eligible or potentially eligible for inclusion on the NRHP.

Fourteen of the project sites were previously determined by the SHPO as not being eligible for listing in the NRHP (LA 85410, LA 85411, LA 85418, LA 85857, LA 85862, LA 85863, LA 85865, LA 85866, LA 86604, LA 99391, LA 99392, LA 99393, LA 99394), including a natural rock outcrop (LA 85868). However, as part of the project was designed to observe the nature of damage to various types of archaeological resources, all but the natural rock outcrop were included in our fire assessment project.

Fire assessment work occurred on June 7 and 8, 2000; October 3 through 6, 18, 19, and 26, 2000; and October 10 and 11, 2001. The majority of the fieldwork was performed by Bradley Vierra, Brian Harmon, Alan Madsen, Jennifer Nisengard, and Kari Schmidt. Additional fieldwork was performed by Bruce Masse, Steve Hoagland, Terry Knight, David Barsanti, Diane Curewitz, Michael Dilley, Scott Gebhardt, Michael Hannaford, and Michael Kennedy.

Table 10.1. All Assessed Sites in the Rendija Canyon Tract.

LA Number	Site Type	Period/Phase	Impacted by Cerro Grande	Non-Fire Impact	Treatment	Comments
LA 15116	1-3 room structure	Ancestral Pueblo	Yes	No	Yes	
LA 21439	1-3 room structure	Classic	Yes	No	No	
LA 70025	1-3 room structure	Late Coalition/ Early Classic	Yes	Yes	Yes	
LA 70026	Historic Structure	Homestead	Yes	Yes	No	
LA 85402	1-3 room structure	Classic				Not relocated
LA 85403	1-3 room structure	Ancestral Pueblo	No	Yes	No	
LA 85404	1-3 room structure	Ancestral Pueblo	No	Yes	No	
LA 85405	1-3 room structure	Classic	Yes	Yes	No	
LA 85406	Rock Feature	Developmental Pueblo	Yes	No	Yes	Not originally identified for treatment in the field, but added because of burn severity
LA 85407	Historic Structure	Homestead	Yes	No	No	
LA 85408	1-3 room structure	Classic	Yes	Yes	No	
LA 85409	1-3 room structure	Classic	Yes	Yes	No	Site determined by SHPO as not eligible for NRHP
LA 85410	Rock Feature	Ancestral Pueblo	Yes	Yes	No	Originally identified for treatment in the field, but removed from consideration due to ineligibility to NRHP as determined by SHPO
LA 85411	Rock Feature	Classic	Yes	Yes	No	Site determined by SHPO as not eligible for NRHP
LA 85412	1-3 room structure	Late Coalition/ Early Classic	No	No	No	
LA 85413	Rock Feature	Classic	No	Yes	No	
LA 85414	1-3 room structure	Ancestral Pueblo	No	Yes	No	
LA 85415	Rock Feature	Classic	No	No	No	
LA 85416	Rock Feature	Classic	Yes	No	Yes	Not originally identified for treatment in the field, but added because of burn severity
LA 85417	1-3 room structure	Ancestral Pueblo	No	No	No	
LA 85418	Rock Feature	Undetermined Prehistoric	No	Yes	No	Site determined by SHPO as not eligible for NRHP
LA 85419	Rock Feature	Classic	Yes	No	No	
LA 85857	1-3 room structure	Classic	Yes	Yes	No	Site determined by SHPO as not eligible for NRHP
LA 85858	Rock Feature	Classic	Yes	No	Yes	
LA 85859	Artifact Scatter	Multi-Component				Not relocated
LA 85860	Rock Feature	Classic	Yes	Yes	Yes	
LA 85861	Artifact Scatter	Late Coalition/ Early Classic	Yes	Yes	No	

Table 10.1. (cont.)

LA Number	Site Type	Period/Phase	Impacted by Cerro Grande	Non-Fire Impact	Treatment	Comments
LA 85862	1-3 room structure	Late Coalition/ Early Classic	No	Yes	No	Originally identified for treatment in the field, but removed from consideration due to ineligibility to NRHP as determined by SHPO
LA 85863	Rock Feature	Late Coalition/ Early Classic	Yes	No	No	Site determined by SHPO as not eligible for NRHP
LA 85864	Rock Ring	Historic	No	Yes	No	
LA 85865	Artifact Scatter	Late Coalition/ Early Classic	No	Yes	No	Site determined by SHPO as not eligible for NRHP
LA 85866	1-3 room structure	Coalition	No	Yes	No	Site determined by SHPO as not eligible for NRHP
LA 85867	1-3 room structure	Classic	No	Yes	No	
LA 85868						Natural rock outcrop. Determined by SHPO as not eligible for NRHP
LA 85869	Rock Ring	Historic	No	No	No	
LA 85870	Rock Feature	Undetermined	Yes	Yes	No	
LA 86553	Wagon Road	Homestead				Not relocated
LA 86604	1-3 room structure	Classic	Yes	No	Yes	Site originally determined by SHPO as not eligible for the NRHP. Additional feature found after fire.
LA 86605	1-3 room structure	Classic	Yes	Yes	Yes	
LA 86606	1-3 room structure	Ancestral Pueblo	Yes	Yes	Yes	
LA 86607	1-3 room structure	Coalition	Yes	Yes	No	
LA 87430	1-3 room structure	Classic	No	Yes	No	Originally identified for treatment in field; removed from consideration due to absence of fire damage
LA 99391	Artifact Scatter	Coalition	No	Yes	No	Site determined by SHPO as not eligible for NRHP
LA 99392	1-3 room structure	Classic	Yes	Yes	No	Site determined by SHPO as not eligible for NRHP
LA 99393	1-3 room structure	Classic	Yes	Yes	No	Site determined by SHPO as not eligible for NRHP
LA 99394	1-3 room structure	Ancestral Pueblo	No	No	No	Site determined by SHPO as not eligible for NRHP
LA 99396	Artifact Scatter	Archaic	No	Yes	No	
LA 99397	Artifact Scatter	Archaic	Yes	Yes	No	
LA 127626	1-3 room structure	Ancestral Pueblo	Yes	No	Yes	
LA 127627	1-3 room structure	Classic	Yes	Yes	Yes	
LA 127628	Rock Feature	Classic	Yes	Yes	No	Originally identified for treatment in the field, but removed from consideration due to low erosion threat and lack of site integrity

Table 10.1. (cont.)

LA Number	Site Type	Period/Phase	Impacted by Cerro Grande	Non-Fire Impact	Treatment	Comments
LA 127629	1-3 room structure	Ancestral Pueblo	Yes	Yes	Yes	
LA 127630	1-3 room structure	Classic	Yes	Yes	Yes	
LA 127632	1-3 room structure	Ancestral Pueblo	No	No	No	
LA 127633	Rock Feature	Ancestral Pueblo	Yes	Yes	Yes	
LA 127634	1-3 room structure	Classic	Yes	Yes	Yes	
LA 127635	1-3 room structure	Classic	Yes	Yes	Yes	
LA 135291	Rock Feature	Ancestral Pueblo	Yes	No	No	Originally identified for treatment in the field, but removed from consideration due to lack of site integrity
LA 135292	Rock Feature	Ancestral Pueblo	Yes	Yes	No	
LA 135293	1-3 room structure	Coalition	Yes	No	Yes	
LA 135294	1-3 room structure	Ancestral Pueblo	No	No	No	

ASSESSMENT OF PREHISTORIC AND TEMPORALLY UNPLACED SITES

Fire-Impacted Prehistoric and Temporally Unplaced Sites

Of the 57 prehistoric and temporally unplaced sites in Rendija Canyon, the fire impacted 35 while three could not be relocated (Table 10.2). The impacted sites are discussed below, as is LA 135294, which, while not impacted by the fire, has not been previously described.

The most common fire impacts caused by the fire were soot damaged and heat spalled masonry. Long-term threats were also created; in areas where the fire burned away the duff and low-lying vegetation and/or totally consumed trees to create stump holes, there is an increased potential for erosion. Trees that were killed by the fire but not totally consumed may fall onto sites, which might damage aboveground architecture and displace subsurface features and artifacts.

Despite the damage caused by the fire, burned off vegetation did allow for the discovery of new sites and new data on some old sites. Four new sites were found (LA 135291, LA 135292, LA 135293, and LA 135294), new features were found at three sites (LA 85858, LA 86604, and LA 127629), and more accurate temporal affiliations were assigned to two sites (LA 127627 and LA 127630). The discovery of a new feature at LA 86604 has changed its standing from not eligible for inclusion on the NRHP to possibly eligible (pending SHPO concurrence).

LA 15116. This site was last visited in 1999 as part of the Land Conveyance and Transfer Project (Hoagland et al. 2000). It is a one- to three-room structure of unshaped tuff blocks scattered over a 6-m by 8-m area. The original structure appears to have been 3 m by 3.5 m with a smaller enclosure inside. The site is located on a gentle north-facing slope above the canyon bottom. Vegetation around the site consists primarily of piñon, juniper, and ponderosa pine trees. No artifacts were observed. The site is likely

Ancestral Puebloan, but the specific period cannot be determined. Around the site the area was severely burned. There are many snags and partially burned trees in the vicinity of the site; approximately five of these have potential to damage the site should they fall. Thirty percent of the tuff blocks are soot damaged, and 10% are heat spalled. As the fire burned away the duff surrounding the site there is a low erosional threat.

Table 10.2. Prehistoric and Temporally Unplaced Sites Directly Impacted by the Cerro Grande Fire.

LA Number	Degree of Burn	Cracking/spalling on masonry	Smoke/soot damage on masonry	Stump/root holes on or adjacent to masonry	Additional stump/root holes in site area	Loss of architectural wood/features	Fallen tree(s) on walls or rubble	Snags/partial burned trees that can damage structures	Additional snags/partial burned trees in site area	Other	Suppression	Rehabilitation	Enhance erosion
15116	Severe	Yes	Yes	No	No	No	No	Yes	Yes	No	No	No	Yes
21439	Low	No	Yes	No	No	No	Yes	No	No	No	No	No	Yes
70025	Severe	Yes	Yes	No	No	No	No	Yes	Yes	No	No	No	Yes
85405	Severe	No	Yes	No	No	No	No	Yes	No	No	No	No	Yes
85406	Severe	Yes	Yes	No	No	No	Yes	Yes	Yes	No	No	No	No
85408	Low	No	Yes	No	No	No	No	Yes	No	Yes	No	No	No
85409	Severe	No	Yes	Yes	No	No	Yes	Yes	Yes	Yes	No	No	Yes
85410	Low	No	No	No	Yes	No	No	No	Yes	No	No	No	Yes
85411	Severe	No	Yes	Yes	No	No	No	Yes	Yes	No	No	No	Yes
85416	Severe	No	No	No	No	No	No	No	Yes	No	No	No	No
85419	Moderate	No	No	No	No	No	No	No	Yes	No	No	No	No
85857	Low	No	No	No	No	No	No	No	Yes	No	No	No	Yes
85858	Severe	No	Yes	No	No	No	No	Yes	Yes	No	No	No	No
85860	Severe	No	Yes	Yes	No	No	No	Yes	Yes	No	No	No	Yes
85861	Severe	No	No	No	Yes	No	No	No	Yes	No	No	No	Yes
85863	Moderate	No	Yes	No	Yes	No	No	No	Yes	No	No	No	Yes
85870	Severe	No	No	No	No	No	No	No	Yes	No	No	No	Yes
86604	Low	No	Yes	No	No	No	No	Yes	No	No	No	No	No
86605	Severe	Yes	Yes	No	No	No	No	No	No	No	No	No	Yes
86606	Severe	Yes	Yes	No	No	No	No	No	Yes	No	No	No	Yes
86607	Severe	No	Yes	No	No	No	No	No	Yes	No	No	No	Yes
99392	Severe	Yes	Yes	No	Yes	No	No	No	Yes	No	No	No	Yes
99393	Moderate	No	No	No	No	No	No	No	No	No	No	No	Yes
99397	Severe	No	Yes	Yes	No	No	Yes	No	No	No	No	No	Yes
127626	Severe	No	Yes	No	No	No	No	Yes	Yes	No	No	No	No
127627	Severe	Yes	Yes	Yes	Yes	No	No	Yes	Yes	No	No	No	Yes
127628	Severe	Yes	Yes	No	No	No	No	No	No	No	Yes	No	Yes
127629	Severe	Yes	Yes	No	No	No	No	Yes	Yes	Yes	No	No	Yes
127630	Severe	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	Yes
127633	Moderate	No	No	No	No	No	No	Yes	No	No	No	No	Yes
127634	Severe	No	Yes	No	Yes	No	No	Yes	Yes	No	No	No	Yes
127635	Severe	No	Yes	No	No	No	No	Yes	Yes	No	No	No	Yes
135291	Moderate	No	Yes	No	No	No	No	No	No	No	No	No	No
135292	Moderate	No	Yes	No	Yes	No	No	No	No	No	No	No	No
135293	Moderate	No	No	No	No	No	No	No	No	No	No	No	Yes

LA 21439. This site was last visited and formally recorded in 1992 as part of the Bason Land Exchange (Peterson and Nightengale 1993) and consists of a mound of unshaped cobbles and boulders (5 by 6 m, 0.4 m high), and two boulder alignments extending from the mound. The first alignment extends 7.5 m to the south while the second alignment extends at least 27 m to the north. The rubble mound appears to be a one- to three-room structure. The site is located at the end of an east-west trending ridge north of the canyon among ponderosa pine trees. Previous work dates the site to the Classic period based on ceramics. The area around the site was slightly burned. There are three large and four or five small snags that could damage the site if they fall. Several of the boulders of the northern alignment are soot damaged. The absence of duff from the site creates a low erosional threat.

LA 70025. This site (Figure 10.2) was last visited in 1992 as part of a LANL Environmental Restoration Project (McGehee et al. 1993). The site consists of two one-room structures (3 m by 3 m and 2 m by 2 m) separated by 7 m. Both structures are composed of mostly unshaped tuff blocks. The site is located on the edge of a low ridge finger in western Cabra Canyon among ponderosa pine trees. Based on ceramics the site probably dates to the Late Coalition or Early Classic. The area around the site was severely burned. There are 40+ snags and partially burned trees in the area; two of these have the potential to damage the site should they fall. All of the masonry on the site is heavily soot damaged, although less than 5% is heat spalled. The duff has been burned off from around the site. As some of the tuff blocks have already started migrating downslope, the absence of duff serves to increase an already high erosional threat.

Figure 10.2. LA 70025, view of larger fieldhouse, facing north.

LA 85405. This site was last visited in 1992 as part of the Bason Land Exchange. The site is a one- to two-room structure (3.5 m by 5 m) of unshaped tuff blocks. The site is located on a steep east-facing slope north of the canyon in piñon-juniper woodland. Ceramics data from pervious surveys and excavations date the site to the Classic period. The area around the site was severely burned. There are three snags to the northwest of the site that may damage it if they fall. Thirty percent of the masonry has suffered slight soot damage. The fire burned off the duff and grasses around the site so there is a low erosional threat.

LA 85406. This site was last visited in 1992 as part of the Bason Land Exchange. The site is a circular rock feature, about 6 m in diameter. Excavations suggest that the subsurface remains of a one- to three-room structure may be present. The site is located on top of a small hill north of the canyon. The vegetation consists of mostly piñon and juniper trees. Previous surveys and excavation have found only a few obsidian flakes in association with the site. Excavations did obtain a radiocarbon sample, which was dated to 1040 ± 60 years BP (probably uncorrected). If this date is associated with the occupation/utilization of the site, the site would date to the Developmental period. The area around the site was severely burned. There are 11 snags in the area; four of these are growing within the masonry and would damage the site if they fell, even though they are relatively small. A fifth snag near the site has potential to damage it. A large branch from a nearby tree has already fallen on the masonry, but it has not caused any damage. Eighty percent of the masonry blocks are soot damaged, 30% are heat spalled.

LA 85408. This site was last visited in 1992 as part of the Bason Land Exchange. The site is a one- to three-room structure of unshaped tuff blocks covering an area of 5 m by 6 m and located on the east-facing slope of a narrow ridge north of the canyon. The vegetation is mixed ponderosa pine forest and piñon-juniper woodland. A two-track road runs 3 m south of the site. Ceramic data from previous surveys and excavations date the site to the Classic period. The area around the site experienced low burning. There are about five snags that could damage the site if they fall. Fifteen percent of the masonry is soot damaged.

LA 85409. This site was last visited in 1992 as part of the Bason Land Exchange. The site is a one- to three-room structure (6 m by 6 m, 0.2 m high) of unshaped tuff blocks. The site is located on a west-facing slope on the north side of the canyon. The dominant vegetation is composed of ponderosa pine, piñon, and juniper. Ceramic data from previous surveys date the site to the Classic period. The area around the site was severely burned. There are five snags in the area, two of which could damage the site if they fall. A sixth tree has already fallen onto the site. Fire damage to the masonry is restricted to the western edge of the site. Forty percent of the masonry has suffered soot damage. Only three of the masonry blocks (less than 1%) are heat spalled. A small metal tag used to identify the site was melted by the heat of the fire. Due to the burned off duff, there is a low erosional threat.

LA 85410. This site was last visited in 1992 as part of the Bason Land Exchange. The site consists of a series of linear rock features of unshaped tuff blocks; these are probably check dams. The site is located on a gentle east-facing slope north of the canyon. Two small drainages and a two-track road run through the site. Comparing maps produced by previous surveys to fire assessment field observations, it appears that there are fewer tuff blocks than there were in the past. The reason for this discrepancy is unknown, although the drainages that run through the site do not seem large enough to remove tuff blocks. The site is in piñon-juniper woodland. Previous surveys found several obsidian and chalcedony flakes and biface fragments at the site. One of the bifaces was identified as a resharpened Archaic projectile point fragment. The check dams are probably Ancestral Puebloan. The northern portion of the site was unaffected by the fire. In the southern area there are several snags on and near the site, and there are five stump holes near the rock features that present an erosional threat. In a letter dated October 6, 2000, the SHPO indicated that this site is not eligible for inclusion on the NRHP.

LA 85411. This site was last visited in 1992 as part of the Bason Land Exchange. The site is a rock pile (5 m by 5 m, 0.3 m high) of unshaped tuff blocks. Thirty to 35 m to the south is a tuff block concentration that may be natural. The site is located on a ridge to the north of the canyon in piñon-juniper woodland. Ceramic data from previous surveys and excavations date the site to the Classic period. The area around the site was severely burned and there are a number of snags in the area, four of which could damage the site if they fell. Additionally, there are two small stump holes near the rock pile, although these do not represent a threat to the site. Twenty percent of the rocks are soot damaged. Due to the slope the site lays on and the severe burning, there is a low erosional threat. In a letter dated October 6, 2000, the SHPO indicated that this site is not eligible for inclusion on the NRHP.

LA 85416. This site was last visited in 1992 as part of the Bason Land Exchange. The site consists of a rock pile of unshaped tuff blocks about 3.5 m in diameter and 0.5 m high. The site is located on an east-west trending ridge in piñon-juniper woodland. Ceramic data from previous surveys and excavations date the site to the Classic period. The area around the site was severely burned, and there are several snags and partially burned trees in the area. No damage to the rock pile from the fire was observed.

LA 85419. This site was last visited in 1992 as part of the Bason Land Exchange. The site consists of a rock pile of unshaped tuff blocks about 6 m in diameter and 1 m high. The site is located on a southeast-facing slope to the north of the canyon. Vegetation consists mostly of ponderosa pines with a few junipers intermixed. One of these juniper trees is growing in the center of the mound. Previous surveys dated this site to the Classic period based on ceramics. The area around the site was moderately burned, and there are a number of snags and partially burned trees present. No damage to the rock pile from the fire was observed.

LA 85857. This site was last visited in 1992 as part of the Bason Land Exchange. The site consists of a one- to three-room structure (5 by 6 m) of tuff blocks. The site is located on a gently south-facing slope on a bench north of Rendija Canyon. The vegetation consists of short grasses and occasional ponderosa pine, piñon, and juniper. Ceramic data from previous surveys date this site to the Classic period. The area around the site was slightly burned, and there are two or three partially burned trees in the area, however they do not pose a threat to the site. The site is located between two drainages that are actively eroding the site. In a letter dated October 6, 2000, the SHPO indicated that this site was not eligible for inclusion on the NRHP.

LA 85858. This site was last visited in 1992 as part of the Bason Land Exchange. The site consists of four roughly circular rock piles of rhyolitic tuff cobbles. The largest (A) is 3 m in diameter and 0.5 m high, a second (B), 8 m to the northeast, is 2 m in diameter and 0.3 m high. The two smallest piles (C) and (D) are each 1 m in diameter, 0.3 m high, and are 18 m and 20 m, respectively, north-northeast of A. Feature D had not been identified by earlier surveys. A juniper had grown in the middle of each pile and each of these trees was destroyed by the fire. Ceramic data from previous surveys date this site to the Classic period. There are a number of snags and partially burned trees in the area, although only three or four have the potential to damage the site. Forty percent of the rocks are soot damaged.

LA 85860. This site was last visited in 1992 as part of the Bason Land Exchange. The site is a large rock pile (5 m in diameter, 0.4 m high) made of unshaped tuff cobbles. There is a depression in the center of the mound that may be the result of pothunting. The site is located on the north-facing slope of an east-west trending ridge in light piñon-juniper woodland. Earlier surveys observed ceramics that date the site to the Classic period. One of these surveys (Hill 1992) also observed a tiponi in the northeast corner of the rock feature. Peterson and Nightengale (1993) state that the tiponi was moved from its original position and partially buried. It is unclear if they mean the position of the tiponi, as observed by Hill, was not original, or if they themselves moved and buried the tiponi. The tiponi was not observed during the fire assessment. The trees around the site were severely burned and a number of them may damage the site if

they fall. There is one stump hole near the rock feature. Ninety percent of the cobbles are soot damaged. As the site is located on an east-facing slope and the duff is absent there is a low erosional threat.

LA 85861. This site was last visited in 1992 as part of the Bason Land Exchange. The site consists of a very diffuse chipped stone and ceramic scatter on an east-facing slope. There is some disagreement on the dating of the site. Hill (1992) dates it to the Late Coalition while Peterson and Nightengale (1993) date it to the Classic period. It seems likely that the site dates to the Late Coalition/Early Classic. The vegetation consists of ponderosa pine, piñon, and juniper, all of which have been severely burned. Before the fire the site was being eroded downslope. The erosion will increase now that the duff has been burned off and a number of stump holes have been created.

LA 85863. This site was last visited in 1992 as part of the Bason Land Exchange. The site consists of a 3-m by 4.5-m sub-rectangular rock feature of rhyolitic tuff cobbles on a south-facing slope. Vegetation consists of ponderosa pine, piñon, and juniper. Previous surveys suggest that this site dates to the Late Coalition or Early Classic period. Although the surrounding trees have been severely burned, there is only a small amount of very light soot damage to the tuff cobbles. The absence of duff at this site creates a low erosional threat. In a letter dated October 6, 2000, the SHPO indicated that this site is not eligible for inclusion on the NRHP.

LA 85870. This site was last visited in 1992 as part of the Bason Land Exchange. The site consists of three rock piles of unshaped tuff blocks (1.6 m by 1 m by 0.3 m, 1.5 m by 1 m by 0.3 m, and 2 m by 1 m by 0.3 m). All three piles are within a 6-m by 5-m area. The site is located on a south-facing slope to the north of the canyon in mixed ponderosa pine forest and piñon-juniper woodland. The temporal affiliation of this site has not been determined. The area around the site has been severely burned; the rock piles, however, do not appear to have been impacted by the fire. Due to the slope the site lays on and the severe burning, there is a low erosional threat.

LA 86604. This site was last visited in 1992 as part of the Environmental Restoration Project. The site consists of the remains of two one-room structures made of unshaped tuff cobbles. Both are about 2 m by 2 m and 0.15 m high. The structures are separated by 1 m. The site is located in an open area on the Sportsmans Club property. Ceramic data from previous surveys date this site to the Classic period. Originally, only one of the structures was recorded. Two junipers were growing in the middle of the second structure obscuring it from sight. These were burned by the fire, thereby revealing the second structure. Should these trees fall they would damage that structure. Additionally, 30% of the masonry of the new feature is soot damaged. The original feature was not impacted by the fire. In a letter dated May 10, 1993, the SHPO indicated that this site was not eligible for inclusion on the NRHP; however, with the discovery of a new feature, this site is now potentially eligible.

LA 86605. The site was last visited in 1992 as part of the Environmental Restoration Project. This site consists of the remains of a one- to two-room structure of both unshaped and well-shaped tuff blocks. The site is located on the Sportsmans Club property at the edge of a ponderosa pine forest. An old trail runs along the north edge of the site. Ceramic data from previous surveys date this site to the Classic period. The area around the site was severely burned. Seventy-five percent of the masonry is soot damaged, and there is a very small amount of heat spalling. Due to the severe burning at the site and a nearby drainage, there is a high erosional threat to the site.

LA 86606. This site was last visited in 1992 as part of the Environmental Restoration Project. The site consists of the remains of a one-room structure of tuff rocks. Some of the rocks are stacked two courses high, others have migrated downslope. Six meters to the west is a four-rock-long (1.5 m long) tuff alignment. The site is located on an isolated finger above and to the south of Cabra Canyon in a heavily wooded ponderosa pine forest. No artifacts were observed, although the site is probably Ancestral

Puebloan. The area around the site was severely burned, but no snags or partially burned trees threaten the site. All of the masonry is soot damaged and spalled. Since much of the duff and surrounding vegetation were destroyed in the fire, erosion is a threat.

LA 86607. This site (Figure 10.3) was last visited in 1992 as part of the Environmental Restoration Project. The site consists of the remains of a two- to four-room structure of tuff blocks. It is situated on top of the ridge forming the south side of Cabra Canyon. A narrow hiking trail runs through the site. Seven tuff blocks from the site were, at some time in the past (circa 5+ years ago), placed across the trail to help prevent erosion. Previous observations on the ceramics of the site indicate that it dates to the Coalition period. The area around the site was severely burned, although there is little vegetation in the immediate site vicinity. Twenty percent of the masonry was soot damaged. Due to the trail and absence of duff around the site, there is a low erosional threat.

Figure 10.3. LA 86607, view of fieldhouse and modern trail, facing north.

LA 99392. This site was last visited in 1992 as part of the Bason Land Exchange. The site consists of the remains of a one-room structure of tuff blocks. Remains of the southwest, southeast, and northwest walls are present; the northeast side is open. The site is located on a gentle northeast-facing slope in ponderosa pine, piñon, and juniper. Previous survey and excavation records date this site to the Classic period. The site is in a severely burned area. There are five snags and one stump hole in the vicinity of the site, but they do not pose a threat. Eighty percent of the masonry is soot damaged, and 10% is heat spalled. Due to the severe burning at the site and two nearby drainages, there is a low erosional threat to the site. In a letter dated October 6, 2000, the SHPO indicated that this site was not eligible for inclusion on the NRHP.

LA 99393. This site was last visited in 1992 as part of the Bason Land Exchange. The site consists of the remains of a one- to three-room structure of tuff blocks (2.5 m by 3 m). The site is located on a south-facing ridge slope in piñon-juniper woodland. Previous survey and excavation data date this site to the Classic period. The site is in a moderately burned area. There are three snags in the vicinity of the site, but they do not pose a threat. In a letter dated October 6, 2000, the SHPO indicated that this site was not eligible for inclusion on the NRHP.

LA 99397. This site was last visited in 1992 as part of the Bason Land Exchange. The site consists of a sparse chipped stone artifact scatter covering 900 m^2. It is located on a gentle east-facing slope of a narrow ridge in piñon-juniper woodland. A small drainage runs across the northern edge of the site, and an old, two-track road runs through its center. Based on the high percentage of obsidian flakes observed by previous surveys and the absence of ceramics, this site probably dates to the Archaic. The area around the site was severely burned. There are three to five fallen trees and about seven stump holes on the site. Due to the severe burning at the site and a nearby drainage, there is a high erosional threat.

LA 127626. This site was last visited in 1999 as part of the Land Conveyance and Transfer Project. The site consists of the remains of a one-room structure of unshaped tuff blocks. It is about 3 m by 3 m in size. The site is located on the northern slope of the south bench of Rendija Canyon in ponderosa pine forest. Although no artifacts were observed, this site is probably Ancestral Puebloan. The site area was severely burned and there are five snags and/or partially burned trees that could damage the site. Ninety percent of the masonry is soot damaged.

LA 127627. This site was last visited in 1999 as part of the Land Conveyance and Transfer Project. The site consists of the remains of a one-room structure of unshaped tuff blocks, 3 m by 3 m in size. The tuff blocks are two courses high. The site is on the north-facing slope of the south bench of Rendija Canyon in ponderosa pine forest and is just north of the Sportsmans Club shotgun range. The duff around the site was burned off, exposing a light artifact scatter which previous surveys had been unable to observe. The ceramics consisted of one Santa Fe Black-on-white sherd, four Biscuit A sherds, two Biscuit B sherds, one indeterminate glazeware sherd, and one smeared-indented corrugated sherd. Chipped stone artifacts consisted of one chalcedony and one rhyolite flake. Based on this data the site can be dated to the Classic period. The area around the site was severely burned. Of the many snags and partially burned trees in the vicinity of the structure, there are five snags that could damage the site. There is one stump hole adjacent to the masonry and a second at some distance from the site masonry. Ninety percent of the masonry is soot damaged, and 30% of it is heat spalled. The absence of duff at the site creates a moderate erosional threat. As this site is at the far end of the shotgun range it is covered by millions of shotgun pellets.

LA 127628. This site was last visited in 1999 as part of the Land Conveyance and Transfer Project. The site consists of a 12-m-long linear rock alignment of unshaped tuff and rhyolite blocks. It is possible that this alignment is the remains of a disturbed fieldhouse. The site is 2 m south of, and parallel to, the Sportsmans Club fence. It is situated just above the north-facing slope of the south bench of Rendija Canyon in relatively open ponderosa pine forest. Previous surveys dated the site to the Classic period based on ceramic data. The area around the site was severely burned, and there is one tree that has the potential to damage the site. All of the masonry is soot damaged and 50% is heat spalled. The absence of duff at this site creates a low erosional threat.

LA 127629. This site was last visited in 1999 as part of the Land Conveyance and Transfer Project. The site consists of two features: one is a one-room structure (2 m by 3 m) of tuff and rhyolite blocks, the second (previously unidentified) feature is a 3-m by 1-m rock feature of tuff blocks. The structure is fairly well preserved with alignments of the north, south, and west walls present. The site is situated on the north-facing slope of the south bench of Rendija Canyon in ponderosa pine forest. The site is next to the Sportsmans Club fenceline, just north of the rifle range. Although no artifacts were observed, this site is

probably Ancestral Puebloan. The area around the site was severely burned. Of the many snags and partially burned trees in the area, at least 10 have the potential to damage the site. Eighty percent of the masonry is soot damaged and 30% is heat spalled. There is also a high erosional threat to the site as it is located on a slope and the surrounding duff was burned off. There are a number of melted bullets from the rifle range on the site; some of the bullets have melted onto the masonry.

LA 127630. This site was last visited in 1999 as part of the Land Conveyance and Transfer Project. The site consists of the remains of a one- to two-room structure (4 m by 4 m) of unshaped tuff and basalt blocks. Erosion has displaced some of the blocks downslope to the north and east. The site is located just above the north-facing slope of the south bench of Rendija Canyon in a heavy ponderosa pine forest. The duff around the site was burned off exposing a light artifact scatter, which pervious surveys had been unable to observe. Four undifferentiated biscuitware sherds, two possible Wiyo Black-on-white sherds, and several other unidentifiable sherds were observed. Based on this data the site dates to the Classic period. The area around the site was severely burned. Of the many snags and partially burned trees in the area, at least 10 have the potential to damage the site. There is one stump hole near the masonry. Eighty percent of the masonry is soot damaged, and 40% is heat spalled. Erosion was a problem before the fire, as the site is on the very edge of a bench. With the duff and plants burned off, it is now an even greater threat.

LA 127633. This site was last visited in 1999 as part of the Land Conveyance and Transfer Project. The site is a rock feature of five upright rhyolite slabs and several unshaped tuff blocks over a 1-m by 2-m area. The site is located on a steep south-facing slope on the north side of Rendija Canyon in heavy ponderosa pine forest. Although no artifacts were observed, this site is probably Ancestral Puebloan. The area around the site was moderately burned. There are two partially burned trees near the site that have the potential to damage it should they fall. As the duff burned off and this site is on a steep slope, there is a high erosional threat.

LA 127634. This site was last visited in 1999 as part of the Land Conveyance and Transfer Project. The site consists of the remains of a two- to three-room structure (3 m by 3 m) of mostly unshaped tuff and rhyolite blocks. The site is located north of Rendija Canyon on a low north-south trending finger gently sloping to the southeast. The site is in heavy ponderosa pine forest. Ceramic data from previous surveys date this site to the Classic period. The area around the site was severely burned. Of the many snags and partially burned trees in the area, about 10 have the potential to damage the site. There are two stump holes in the site vicinity, but they do not represent a threat. All of the masonry is soot damaged. With the duff absent erosion is also a threat.

LA 127635. This site was last visited in 1999 as part of the Land Conveyance and Transfer Project. The site consists of the remains of a one-room structure (2.5 m by 3.5 m) of unshaped tuff blocks. There is very little rubble remaining but the foundation is intact. The site is located to the north of Rendija Canyon on a low north-south trending ridge among ponderosa pines. Ceramic data from previous surveys date the site to the Classic period. There are many snags and partially burned trees surrounding the site, a number of which could damage the structure if they fall. All of the masonry on the site is soot damaged. Since the site is on a slope and all the duff and smaller vegetation were destroyed during the fire, there is the threat of erosion.

New Sites

LA 135291 (BCH-1). This site (Figure 10.4) consists of a scatter (10 m by 10 m) of mostly unshaped tuff blocks. It is not clear if these blocks are the remains of a structure, a rock pile, or something else. The site is located just above the north-facing slope of the south bench of Rendija Canyon in a lightly forested

area. Several unidentifiable sherds and one obsidian flake were found at the site. This site is probably Ancestral Puebloan. The area below the site—the bench slope and canyon bottom—suffered severe burning, and there are two junipers in the center of the tuff blocks that were burned by the fire; these could damage the site if they fall. Otherwise, no burning occurred in the site area. Many of the masonry blocks are soot damaged.

Figure 10.4. LA 135291, view of rock feature, facing east.

LA 135292 (JEN-1). This site consists of a small (1-m by 2-m) pile of tuff blocks. It is not clear if these blocks are the remains of a structure, a rock pile, or something else. The site is located in a clearing on the south bench of Rendija Canyon. A number of scrub oaks have grown on and near the site. Several unidentified sherds and Cerro Pedernal chert flakes were observed. The site is probably Ancestral Puebloan. The scrub oak at the site was partially burned, but the snags do not represent a threat to the site. Several of the tuff blocks are soot damaged.

LA 135293 (WBM-101). This site consists of a one- to three-room structure of unshaped tuff blocks. The site is located among ponderosa pine on a northeast-facing slope north of the canyon. One smeared corrugated sherd was observed. The site is Coalition. The area around the site was moderately burned and there are several snags in the area that have the potential to damage the site. A stump hole near the masonry creates an erosional threat. Several of the masonry blocks are soot damaged.

LA 135294 (WBM-100). This site consists of a two- to three-room structure (4 m by 8 m) of unshaped tuff blocks and a possible second feature (a 2-m by 3-m cluster of unshaped tuff blocks) 20 m to the east.

The site is located on top of an east-west running ridge north of the canyon in piñon-juniper woodland. Several obsidian flakes were observed, suggesting that the site is Ancestral Puebloan. The fire did not affect this site.

Non-Fire Related Impacts to Prehistoric and Temporally Unplaced Sites

Thirty-seven prehistoric and temporally unplaced sites have been impacted by, or have the potential to be impacted by, non-fire related effects (Table 10.3). Two of these sites (LA 85864 and LA 85867; both probable Athabaskan teepee rings) do date to the Historic period but are included in this section because they are treated, for management purposes, as prehistoric/temporally unplaced sites.

Several sites have been affected by more than one impact. The most common impact is natural erosion caused by the location of the site (e.g., on a steep slope, near a large drainage, etc.). Thirty-two sites face some kind of natural erosion threat. The second most common impact is the passage of one or more trails and/or dirt two-track roads near or through a site. The passage of motorized and non-motorized vehicles over a site can destroy artifacts, masonry, and other features. Non-vehicular traffic is less destructive; however, sites situated on or near trails are exposed to the threat of vandalism and pot hunting. Additionally, both two-track roads and trails may act as channels for erosion and can impact sites even if traffic along the route ceases. Eleven sites have a trail and/or two-track road running near and/or through them. Two sites have had masonry blocks moved or removed. In the case of LA 86607 the masonry was placed across the trail running through the site to help prevent erosion. In the case of LA 85403, several masonry block-sized holes indicated a recent removal of part of the site. Finally, ammunition is accumulating at two sites down range of the Sportsmans Club firing ranges.

Table 10.3. Prehistoric And Temporally Unplaced Sites in Rendija Canyon with Damage not Related to the Cerro Grande Fire.

LA Number	Non-fire Impact
70025	Erosional threat: high (on narrow ridge)
85403	Vandalism (some masonry removed)
85404	Erosional threat: low (near drainage)
85405	Erosional threat: low (on slope)
85408	Two-track road near site
85409	Erosional threat: low (on slope)
85410	Erosional threat: low (two small drainages run through site), Two-track road catches edge of site
85411	Erosional threat: low (on slope)
85413	Erosional threat: low (on slope)
85414	Erosional threat: high (on slope), Two-track road runs through site
85418	Erosional threat: low (at edge of drainage)
85857	Erosional threat: high (pedestaled between two drainages)
85860	Erosional threat: low (on slope)
85861	Erosional threat: low (on slope)
85862	Two-track road runs directly over masonry
85864	Erosional threat: high (pedestaled by surrounding drainages)
85865	Erosional threat: low (on slope)
85866	Erosional threat: low (near drainage), Two-track runs through site
85867	Two-track road runs through site
85870	Erosional threat: low (on slope)
86605	Erosional threat: high (near drainage), Trail catches edge of site
86606	Erosional threat: high (on slope)

Table 10.3. (cont.)	
LA Number	**Non-fire Impact**
86607	Erosional threat: low (on slope), Trail runs through site, Some masonry moved (see notes on site)
87430	Erosional threat: high (at edge of eroding bench), trail catches edge of site
99391	Erosional threat: low (at edge of drainage), Two-tracks run through site
99392	Erosional threat: low (small drainages at edges of site)
99393	Erosional threat: low (on slope)
99396	Erosional threat: low (on slope)
99397	Erosional threat: high (near drainage)
127627	Erosional threat: high (on slope), Covered with shotgun shell pellets
127628	Erosional threat: low (on slope)
127629	Erosional threat: high (on slope), Melted and non-melted bullets on site
127630	Erosional threat: high (on slope)
127633	Erosional threat: high (on slope)
127634	Erosional threat: high (on slope)
127635	Erosional threat: high (on slope)
135292	Two-track road catches edge of site

Recommended Treatments for Prehistoric and Temporally Unplaced Sites

Treatment for fire-related impacts is recommended for 19 sites (Table 10.4). Most sites need erosion control, variously in the form of wattles, straw bales, or excelsior matting, and several sites require or may require stump filling and tree felling. Two sites require only monitoring. Additional treatment for non-fire related impacts is recommended for four sites. For further comments on treatment, see the discussion in Chapter 13.

Table 10.4. Prehistoric and Temporally Unplaced Sites in Rendija Canyon Recommended for Treatment.

LA Number	**Site Type**	**Treatment**
15116	Fieldhouse	Wattles (2)
21439	Fieldhouse	Tree felling (3); tree removal (3); fencing (433 ft)
70025	Fieldhouse	Excelsior matting (1); wattles (5); seed (0.4 ac); straw bales (10)
85406	Fieldhouse Rock Feature	Tree felling (6); tree removal (6); fencing (108 ft)
85415	Rock Feature	Fencing (246 ft)
85416	Rock Feature	Tree felling (6); tree removal (6); fencing (377 ft)
85419	Rock Feature	Fencing (125 ft)
85858	Rock Feature	Tree felling (8); tree removal (8); fencing (377 ft)
85860	Rock Feature	Excelsior matting, tree felling (10); tree removal (10; fencing (87 ft)
85870	Rock Feature	Fencing
86606	Fieldhouse	Excelsior matting (1); wattles (2), seed (0.1 acre);, straw bales (3)
127626	Fieldhouse	Wattles (2)
127627	Fieldhouse	Wattles (3); fill stump hole (1); straw bales (5); seed (0.2 ac)
127629	Fieldhouse	Wattles (4); straw bales (5); seed (0.3 ac)
127630	Fieldhouse	Fill stump hole (1); wattles (3); straw bales (3); seed (0.2 ac)
127633	Rock Feature	Wattles (2); straw bale (1); seed (0.1 ac)
127634	Fieldhouse	Wattles (3); straw bales (3); seed (0.1 ac)
127635	Fieldhouse	Excelsior matting (1); wattles (3); straw bales (3); seed (0.1 ac)
135293	Fieldhouse	Fill stump hole (1)
85862*	Fieldhouse	Data recovery

Table 10.4. (Cont.)

LA Number	Site Type	Treatment
86605*	Fieldhouse	Fence off site
87430*	Fieldhouse	Data recovery
135292*	Rock Feature	Possibly fence off site

* The recommended treatments for these sites are for non-fire related impacts